

## Test Procedure for §170.306 (b) Record demographics

This document describes the draft test procedure for evaluating conformance of complete EHRs or EHR modules to the certification criteria defined in 45 CFR Part 170 Subpart C of the Interim Final Rule (IFR) as published in the Federal Register on January 13, 2010. The document is organized by test procedure and derived test requirements with traceability to the normative certification criteria as described in the Overview document located at [http://healthcare.nist.gov/docs/TestProcedureOverview\\_v1.pdf](http://healthcare.nist.gov/docs/TestProcedureOverview_v1.pdf). These test procedures will be updated to reflect the certification criteria defined in the ONC Final Rule.

### CERTIFICATION CRITERIA

§170.306 (b) Record demographics. Enable a user to electronically record, modify, and retrieve patient demographic data including preferred language, insurance type, gender, race, ethnicity, date of birth, and date and cause of death in the event of mortality.

### INFORMATIVE TEST DESCRIPTION

This section provides an informative description of how the test procedure is organized and conducted. It is not intended to provide normative statements of the certification requirements.

This test evaluates the capability for a Complete EHR or EHR Module<sup>1</sup> to enable a user to electronically record, modify, and retrieve a patient's demographic data describing their preferred language, insurance type, gender, race, ethnicity, date of birth, and date and cause of death. Per the IFR criteria, the test procedure does not evaluate the ability to record, modify and retrieve other types of patient demographic information.

This test procedure is organized into three sections:

- Record - evaluates the capability to enter patient demographic data into the EHR
  - The Tester enters the NIST-supplied patient preferred language, insurance type, gender, race, ethnicity, date of birth, and date and cause of death
- Modify – evaluates the capability to correct/update patient demographic data that have been previously entered into the EHR
  - The Tester displays the patient preferred language, insurance type, gender, race, ethnicity, and date of birth data entered during the Record Patient Demographics test
  - The Tester corrects/updates the previously entered demographics data using NIST-supplied patient preferred language, insurance type, gender, race, ethnicity, date of birth, and date and cause of death

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<sup>1</sup> Department of Health and Human Services, 45 CFR Part 170 Proposed Establishment of Certification Programs for Health Information Technology, Proposed Rule, March 10, 2010.

- **Retrieve** – evaluates the capability to display and view the patient demographic data that have been previously entered into the EHR
  - The Tester displays the patient preferred language, insurance type, gender, race, ethnicity, date of birth, and date and cause of death data entered during the test
  - The Tester validates that the displayed demographic data are accurate and complete

## REFERENCED STANDARDS

None

## NORMATIVE TEST PROCEDURES

### Derived Test Requirements

DTR170.306.b – 1: Electronically Record Patient Demographics

DTR170.306.b – 2: Electronically Modify Patient Demographics

DTR170.306.b – 3: Electronically Retrieve Patient Demographics

### DTR170.306.b – 1: Electronically Record Patient Demographics

#### Required Vendor Information

VE170.306.b – 1.01: Vendor shall identify the EHR function(s) that are available to: 1) enter the patient's preferred language, insurance type, gender, race, ethnicity, date of birth, and date and cause of death, 2) modify these demographic data, and 3) retrieve these demographic data

#### Required Test Procedure:

TE170.306.b – 1.01: Tester shall select patient demographic data from NIST-supplied test data sets

TE170.306.b – 1.02: Using the EHR function(s) identified by the Vendor, the Tester shall enter demographic data from the test data sets, including

- the patient's preferred language
- the patient's insurance type
- the patient's gender
- the patient's race
- the patient's ethnicity
- the patient's date of birth
- the patient's date of death
- the patient's cause of death

TE170.306.b – 1.03: Using the NIST-supplied Inspection Test Guide, the Tester shall verify that the patient demographic test data have been entered correctly and without omission

### Inspection Test Guide

IN170.306.b – 1.01: Tester shall verify that the patient demographic test data are entered correctly and without omission

IN170.306.b – 1.02: Tester shall verify that the patient demographic data entered during the test are stored in the patient's record, including

- the patient's preferred language
- the patient's insurance type
- the patient's gender
- the patient's race
- the patient's ethnicity
- the patient's date of birth
- the patient's date of death
- the patient's cause of death

### **DTR170.306.b – 2: Electronically Modify Patient Demographics**

#### Required Vendor Information

- As defined in DTR170.306.b – 1, no additional information is required

#### Required Test Procedure:

TE170.306.b – 2.01: Tester shall select patient demographic test data from NIST-supplied test data sets

TE170.306.b – 2.02: Using the EHR function(s) identified by the Vendor, the Tester shall select the patient record used for the Record Patient Demographics test, shall display the patient demographic data entered during the Record Patient Demographics test, and shall correct/update these demographic data, including

- the patient's preferred language
- the patient's insurance type
- the patient's gender
- the patient's race
- the patient's ethnicity
- the patient's date of birth
- the patient's date of death
- the patient's cause of death

TE170.306.b – 2.03: Using the NIST-supplied Inspection Test Guide, the Tester shall verify that the patient demographic data entered in the Modify Patient Demographics test have been entered correctly and without omission

Inspection Test Guide:

- IN170.306.b – 2.01: Tester shall verify that the patient demographic data entered during the Record Patient Demographics test can be accessed and corrected/updated
- IN170.306.b – 2.02: Tester shall verify that the modified demographic data entered during the test are stored in the patient's record, including
- the patient's preferred language
  - the patient's insurance type
  - the patient's gender
  - the patient's race
  - the patient's ethnicity
  - the patient's date of birth
  - the patient's date of death
  - the patient's cause of death

**DTR170.306.b – 3: Electronically Retrieve Patient Demographics**

Required Vendor Information

- As defined in DTR170.306.b – 1, no additional information is required

Required Test Procedure:

- TE170.306.b – 3.01: Using the EHR function(s) identified by the Vendor, the Tester shall select the patient record used for the Record Patient Demographics test and shall display the patient demographic data entered during the Record and Modify Patient Demographics tests, including
- the patient's preferred language
  - the patient's insurance type
  - the patient's gender
  - the patient's race
  - the patient's ethnicity
  - the patient's date of birth
  - the patient's date of death
  - the patient's cause of death
- TE170.306.b – 3.02: Using the NIST-supplied Inspection Test Guide, the Tester shall verify that the patient demographic test data display correctly and without omission

Inspection Test Guide

IN170.306.b – 3.01: Tester shall verify that the patient demographic data entered in the Record Patient Demographics test and edited in Modify Patient Demographics test display correctly and without omission, including

- the patient's preferred language
- the patient's insurance type
- the patient's gender
- the patient's race
- the patient's ethnicity
- the patient's date of birth
- the patient's date of death
- the patient's cause of death

## EXAMPLE TEST DATA

### **Data Set 1:**

#### *Record Demographics*

Data Type	Data
Preferred Language	Italian
Insurance Type	Commercial
Gender	Male
Race	White
Ethnicity	Hispanic or Latino
Date of Birth	03/14/1945
Date of Death	3/2/2010
Cause of Death	Acute Myocardial Infarction

#### *Modify Demographics*

*Modify each of the demographic data types with new demographic data.*

Data Type	Data
Preferred Language	Japanese
Insurance Type	Managed Care
Gender	Female
Race	Asian
Ethnicity	Not Hispanic or Latino
Date of Birth	09/17/1954
Date of Death	3/6/2010
Cause of Death	Asthma

## **Data Set 2:**

### *Record Demographics*

Data Type	Data
Preferred Language	Spanish
Insurance Type	Medicare
Gender	Male
Race	African American
Ethnicity	Not Hispanic or Latino
Date of Birth	02/24/1934
Date of Death	3/3/2010
Cause of Death	Septicemia

### *Modify Demographics*

*Modify each of the demographic data types with new demographic data.*

Data Type	Data
Preferred Language	English
Insurance Type	Medicaid
Gender	Female
Race	White
Ethnicity	Hispanic or Latino
Date of Birth	02/24/1974
Date of Death	2/3/2010
Cause of Death	Nephritis

## **Data Set 3:**

### *Record Demographics*

Data Type	Data
Preferred Language	French
Insurance Type	Commercial
Gender	Female
Race	White
Ethnicity	Not Hispanic or Latino
Date of Birth	05/26/1964
Date of Death	2/27/2010
Cause of Death	Chronic liver disease

*Modify Demographics*

*Modify each of the demographic data types with new demographic data.*

Data Type	Data
Preferred Language	Portuguese
Insurance Type	Self-pay
Gender	Male
Race	African American
Ethnicity	Hispanic or Latino
Date of Birth	05/24/1964
Date of Death	2/16/2010
Cause of Death	Diabetes Mellitus

**Data Set 4:**

*Record Demographics*

Data Type	Data
Preferred Language	English
Insurance Type	Medicaid
Gender	Female
Race	Asian
Ethnicity	Not Hispanic or Latino
Date of Birth	07/20/1970
Date of Death	3/4/2010
Cause of Death	Breast Cancer

*Modify Demographics*

*Modify each of the demographic data types with new demographic data.*

Data Type	Data
Preferred Language	Spanish
Insurance Type	Self-pay
Gender	Male
Race	White
Ethnicity	Hispanic or Latino
Date of Birth	07/21/1970
Date of Death	3/5/2010
Cause of Death	Chronic Obstructive Lung Disease

**Data Set 5:**

*Record Demographics*

Data Type	Data
Preferred Language	Russian
Insurance Type	Self-pay
Gender	Male
Race	White
Ethnicity	Not Hispanic or Latino
Date of Birth	10/30/1975
Date of Death	3/8/2010
Cause of Death	Homicide

*Modify Demographics*

*Modify each of the demographic data types with new demographic data.*

Data Type	Data
Preferred Language	French
Insurance Type	Commercial
Gender	Female
Race	Pacific Islander
Ethnicity	Hispanic or Latino
Date of Birth	10/20/1976
Date of Death	3/9/2010
Cause of Death	Influenza

**CONFORMANCE TEST TOOLS**

None